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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,686	03/09/2004	Teiji Yamamoto	04021/LH	4859

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EXAMINER

JULES, FRANTZ F

ART UNIT

PAPER NUMBER

3617

DATE MAILED: 02/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/797,686

Applicant(s)

YAMAMOTO ET AL.

Examiner

Frantz F. Jules

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-24 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,6,12-15 and 17 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,8-11,16 and 18-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 12/01/2005.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 5, 16, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Attwell (US 2,535,254) in view of Hefter (US 6,758,145).

Attwell discloses a crawler structure comprising an endless crawler belt wound between a sprocket (22) and an idler (18) of a crawler vehicle; and a crawler belt link grinding system constituted by plate member (29) for grinding treads of links (24) of a crawler belt link which includes ground engaging lugs (26) since during operation of the crawler, plate member 29 constantly grind the inner surface of the track links, wherein the plate member (29) has a width that is larger than an outside width of the links (24) as seen in fig. 2 and a length tat is longer than one pitch of the links.

Attwell discloses all of the features as disclosed above but does not disclose a grinding system comprising an abrasive plate. The general concept of providing a grinding system comprising an abrasive plate to a vehicle is well known in the art as illustrated by Hefter which discloses the teaching of a grinding system comprising an abrasive plate to a vehicle. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Attwell to include the use of a grinding system comprising an abrasive plate (33) to his advantageous crawler belt as taught by Hefter in order to

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improve the surface cleaning of the track while providing a cleaning system that is durable in construction, carefree of maintenance, easy to assemble.

3. Claims 8-11, 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer (US 3,053,334) in view of Smyth (US 1,660,100) and Hefter (US 6,758,145). Bauer discloses a crawler structure comprising an endless crawler belt wound between two idler (14) of a crawler vehicle, a track roller (17) disposed under the frame, a carrier roller (17) disposed on said track frame; and a crawler belt link cleaning system constituted by plate member (23) for cleaning treads of links of a crawler belt link (11) since during operation of the crawler, plate member 23 constantly rubs the respective treads of the track links.

Bauer discloses all of the features as disclosed above but does not disclose a crawler structure comprising a sprocket and a grinding system comprising an abrasive plate.

The general concept of providing a sprocket to a crawler structure is well known in the art as illustrated by Smyth which discloses the teaching of a sprocket (D) in a crawler structure. Also, the general concept of providing a grinding system comprising an abrasive plate to a vehicle is well known in the art as illustrated by Hefter which discloses the teaching of a grinding system comprising an abrasive plate to a vehicle. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bauer to include the use of a sprocket in his advantageous track assembly as taught by Smyth in order to reduce the risk of slippage in the track thereby increasing traction in the track assembly. In addition, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Bauer to include the use of a

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grinding system comprising an abrasive plate (33) to his advantageous crawler belt as taught by Hefter in order to improve the surface cleaning of the track while providing a cleaning system that is durable in construction, carefree of maintenance, easy to assemble.

Response to Arguments

4. Applicant's arguments filed 12/01/05 have been fully considered but they are moot in view of the new ground of rejection.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Parisotto et al and Moon are cited to show related crawler belt comprising a plate for grinding the tread of the belt.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 272-6681. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 272-6684. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Frantz F. Jules
Primary Examiner
Art Unit 3617

FFJ

February 19, 2006

FRANTZ F. JULES
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'Frantz F. Jules', with a stylized flourish at the end.